

**AGREEMENT**

This Agreement is entered into at (location) \_\_\_\_\_,  
Goa, on this(date) \_\_\_\_\_ day of (month) \_\_\_\_\_  
(year)\_\_\_\_\_.

**BETWEEN**

The Electricity Department, Goa (EDG), with its registered office located at 3<sup>rd</sup> floor, Vidyut Bhavan, Panaji, Goa (hereinafter referred as the "EDG") of the ONE PART.

**AND**

Shri/Smt/kum. \_\_\_\_\_ son/Daughter of  
\_\_\_\_\_ at (Address)\_\_\_\_\_

having its Consumer Contract Account No. \_\_\_\_\_  
(hereinafter referred as "Prosumer" (Producer-cum-Consumer). OR

M/s. \_\_\_\_\_ at (Address) \_\_\_\_\_,  
registered under \_\_\_\_\_ Act have authorised to sign

Shri/Smt. \_\_\_\_\_, Owner/  
Proprietor/ Director, having its registered office at (Address)  
\_\_\_\_\_, by virtue of Resolution No.

\_\_\_\_\_ dated \_\_\_\_\_ and having its consumer  
contract Account No.\_\_\_\_\_. (hereinafter referred to as  
the "Prosumer" (Producer-cum-Consumer) which expression shall, unless  
repugnant to the context or meaning thereof, mean and include its  
successors, executors, administrators and permitted assignee) of the  
OTHER PART.

The EDG and Prosumer are individually referred to as "Party" and  
collectively as "Parties".

WHEREAS, the Prosumer intends to connect and operate the "Solar  
Photo Voltaic Roof Top/Ground Mounted" (SPV) system with the

EDG HT/LT Distribution system for sale of Solar Power to the EDG in terms of the Solar Power as per the Joint Electricity Regulatory Commission for the State of Goa and Union Territories Grid Connected Solar Power Regulations -2015. and as amended from time to time (hereinafter referred to as “JERC Regulations”);

AND WHEREAS, the Prosumer intends to install a SPV system of ..... kWp capacity on the roof top/ground mounted of the premises situated at..... . ..... and having the Consumer Number (Cons. No) ..... in the same premises under Sub-Division ...., in the Jurisdiction of Division..... of the EDG with contract demand ...kW/KVA;

AND WHEREAS, the Prosumer intends to self-consume the power generated from the SPV system and feed excess power to the EDG network which shall be recorded in the bi-directional meter installed by the Prosumer in their premises from the date of declaration for commercial operation of the SPV plant;

AND WHEREAS, the application has been duly verified and forwarded by the Goa Energy Development Agency (GEDA), being the agency designated by the Joint Electricity Regulatory Commission (Hereinafter referred to as “JERC”) to the EDG;

AND WHEREAS, the EDG has verified the application after verification and forwarded by GEDA and agrees to purchase net energy exported by such SPV system at the Tariff as approved by JERC on year to year basis and as approved by EDG. However,

Agreement shall come into operation from the date of commercial operation (COD) of the SPV Plant.

Now, therefore, this Agreement witnesses and the parties hereto hereby mutually agree as under: -

**1. Definitions, Abbreviations and Interpretations shall be as per JERC Regulation.**

**2. Technical and Interconnection Requirements:**

**Prosumer shall,**

- 2.1. comply with the standards and conditions in respect of integrating the SPV system with the grid/distribution system.
- 2.2. connect the SPV system to the EDGs distribution system and shall be bound by requirements of JERC/State Grid and Distribution Code as amended from time to time.
- 2.3. prior to connection of SPV system to the EDGs distribution system, make provision of an inverter having an automatic inbuilt isolation device which should cut-off the SPV system in the event of grid failure.
- 2.4. Provide external manual isolation mechanism with suitable locking facility so that the SPV system does not back-feed into the EDG's network in case of power outage of the EDG's distribution system and it shall be accessible for the EDG to operate, if required, during maintenance / emergency conditions.
- 2.5. install all the equipment of SPV system compliant with relevant International (IEEE/IEC) and Indian standards (BIS).
- 2.6. design, engineer and construct and operate the SPV system with reasonable diligence subject to all applicable Indian laws, rules & regulations as amended from time to time, and regulation having the force of law.

2.7. adhere to the following power quality measures as per the International and Indian standards and/or such other measures stipulated by the JERC Regulation namely: -

- a) Harmonic current: Harmonic current injections from a generation unit shall not exceed the limits specified in IEEE 519.
- b) Synchronization: SPV system shall be equipped with grid frequency synchronization device. Every time the generating station shall be synchronized to the electricity system. It shall not cause voltage fluctuation greater than +/- 5% at the point of interconnection.
- c) Voltage at the injection point shall be in the operating range of 80% to 110% of the nominal connected voltage. Beyond the clearing time of 2 seconds, the solar plant shall isolate itself from the grid.
- d) Flicker: Operation of Photovoltaic system shall not cause voltage flicker in excess of the limits stated in the relevant sections of IEC 61000 standards or other equivalent Indian standards, if any.
- e) Frequency: When the Distribution system frequency deviates outside the specified conditions (50.5 Hz on upper side and 47.5 Hz on lower side), the SPV system shall shift to island mode. There shall be over and under frequency trip functions with clearing time of 0.2 seconds.
- f) DC Injection: Photovoltaic system shall not inject DC power more than 0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions.

g) Power Factor: While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 shall be maintained.

2.8 The SPV system, in the event of power outage or voltage or frequency variations, shall island/disconnect itself automatically and shall not inject power to the EDG distribution systems as per IEC standards within the stipulated period.

### **3. Safety:**

3.1 Prosumer shall comply with the Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations, 2010.

3.2 Prosumer agrees that the design, installation, maintenance and operation of the SPV system are performed in a manner conducive to the safety of the SPV system as well as the EDGs distribution system.

3.3 Solar Power Generator shall install a main switch or isolator with Double pole / Triple pole with neutral isolating disconnect switches with locking arrangement near the Energy Feed-In Meter, which is accessible to the EDG and with which the Prosumers Solar Power Plant could be disconnected from the EDG's distribution system.

3.4 If the Prosumer's SPV system either causes damage to and/or produces adverse effects affecting other distribution systems, consumer's or EDG assets, the Prosumer shall disconnect SPV system immediately from the distribution system upon direction from the EDG and correct the problem at its own expense prior to

reconnection. The Prosumer however, shall continue to get the normal power supply from the EDG's distribution system in the event of isolation of the SPV system from the grid.

- 3.5 The Prosumer shall be solely responsible for any accidents to human beings/animals whatsoever (fatal/non-fatal/departmental/non-departmental) that may occur due to back feeding from the SPV plant when the grid supply is off.
- 3.6 The EDG reserves the right to disconnect the SPV system at any time in the event of SPV power plant damaging to its grid or meter, etc. or to prevent any accident or damage.
- 3.7 Rest of the safety measures as per clause 24 of the JERC Regulations.

#### **4 Clearances and Approvals:**

The Prosumer agrees to obtain all the statutory approvals and clearances if applicable before connecting the SPV system to the network of the EDG.

#### **5 Access and Disconnection:**

- 5.1 The EDG shall have access to metering equipment and disconnecting other devices of SPV system, both automatic and manual, at all times.
- 5.2 In emergency or outage situation, where there is no access to the disconnecting devices, both automatic and manual, such as a switch or breaker, the EDG may disconnect its distribution system from the SPV system.

**6 Liabilities:**

- 6.1 The Prosumer agrees that the EDG shall not be responsible for any damages to his solar power plant resulting from parallel operation with the grid and that the EDG shall not be liable to pay any such damages or compensation to the Prosumer.
- 6.2 The EDG and Prosumer shall not be liable to each other for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for indirect, consequential, incidental or special damages, including, but not limited to, punitive or exemplary damages, whether any of the said liability, loss or damages arise out of the contract, or otherwise.
- 6.3 The Subsidy/Incentives to the Prosumer would be as per the State's Solar Policy 2017 and as amended from time to time.

**7 Tariff:**

The solar Energy Tariff agreed upon between the EDG and the Prosumer under this Agreement is as detailed below:

- a) The feed in tariff for the settlement of net surplus energy credits outstanding at the end of the settlement period will be as per the Joint Electricity Regulatory Commission (JERC) approved solar tariff rates for that year or Average Power Purchase Cost (APPC) as per current year Tariff Order of JERC whichever is lower. However, this Tariff will remain fixed for the period of 5 (five) years and subsequently will be revised every five years and notified separately and will be applicable to all Prosumers with effect from the date of notification.

- b) Tariff/Price per kilowatt-hour: Rs. \_\_\_\_\_, (Rupees \_\_\_\_\_) and will be revised as per 7(a) above.
- c) Validity: This Agreement shall be in a force for Twenty-five (25) years from the date of commercial operation of the plant for the capacity commissioned on that date.
- d) If only a part of plant capacity is commissioned within the specified time, the solar tariff applicable shall be for the part capacity that is commissioned. The tariff for the balance part of un-commissioned project shall be fixed on its commissioning. Both Tariffs would be in line with clause 7 (a) of this Agreement.
- e) The Prosumer shall not be entitled to claim compensation, if its SPV system is not in a position to inject surplus solar power generation to the EDG network on account of failure of power supply in the grid/network for whatsoever reasons, such as line clear, load shedding and line faults etc., and no compensation shall be paid for the above reasons by the EDG.
- f) The Prosumer shall be exempted from charges in respect of electricity banking, wheeling within the State of Goa, line losses and cross subsidy to the extent of the solar energy produced.

## **8 Billing and Payment:**

- 8.1 At the end of each Billing Cycle, the EDG shall take readings of imported and exported energy as recorded in the bi-directional service connection meter. The Prosumer shall be presented an **electricity bill** indicating the difference between the imported and

exported energy (i.e. the net-imported energy). Such bill shall be raised at the consumer tariff applicable to the Prosumer's service connection, if the import is higher than the export of the energy.

- 8.2 If, during a billing cycle including any export surplus already available to the credit of the Prosumer at the beginning of the billing cycle or a credit of banked energy available, the energy exported exceeds the energy imported, the export surplus shall be carried over to the next billing cycle in kWh (electricity units) as a credit to be adjusted in the next billing cycle(s) for the unadjusted exported units in terms of energy units.
- 8.3 In case the Prosumer is under the ambit of time of day tariff, as determined by the JERC from time to time, the electricity consumption in any time block (e.g. peak hours, off-peak hours, etc.) shall be first compensated with the electricity generation in the same time block. Any cumulated excess generation over consumption in any other time block in a billing cycle shall be accounted as if the excess generation occurred during off-peak time block.
- 8.4 A final settlement energy bill shall be prepared by the EDG at the end of each settlement period, after crediting the exported energy surplus (in kWh) under the Net Metering and in other service connections of the Prosumer within the State of Goa if the Prosumer opts for using Group Net Metering facility.
- 8.5 The energy exported to the Grid (measured in kWh) can only be utilized to offset the electricity consumption (measured in kWh) and not for adjustment of any other fees or charges levied by the EDG.
- 8.6 The settlement period of overall export **energy surplus** shall be 1<sup>st</sup> April to 30<sup>th</sup> September and 1<sup>st</sup> October to 31<sup>st</sup> March. Adjusted net

export energy surplus shall be purchased by the EDG at the rate agreed in this Agreement. The amount shall be credited to the Prosumer's account within 30 days of issue of the bill. The EDG shall pay interest at the rate of 1.25% (One & Quarter Percent) per month (on per day basis) as late payment charges for any delay in payment for the net energy exported beyond 30 (Thirty) days period from the date of issue of the bill.

8.7 For payment of bill, a rebate of 2% (Two Percent) shall be allowed if the amount is paid to the Prosumer's account within five working days of issue of the bill. If payment is made beyond five working days but within thirty days of issue of bill, a rebate of 1% (One Percent) shall be allowed.

8.8 If the Energy Feed-In Meter becomes defective the Net Exported Energy for the days during which the meter is defective shall be computed as follows:

- i) If the Prosumer has installed an Energy Feed-In Check Meter, the readings of that meter shall be used.
- ii) In the absence of an Energy Feed-In Check Meter or if that meter is also defective, it shall be the responsibility of the Prosumer to repair /replace the meters at the earliest, failing which, billing shall be suspended for that period.

8.9 The Prosumer is to submit to EDG account of the power generated annually before the financial year end.

8.10 The Prosumer shall be billed on net metering upto sanction load / Contract Demand such that anticipated generation in the year is not more than 100% of electricity consumption in previous 12 months.

**9 Metering:**

- 9.1 The Prosumer shall install one Bi-directional meter for recording export and import of energy and separate Electronic Energy meter at the generating bus to measure total solar power generation.
- 9.2 Prosumer shall test all the meters at MRT Division of the EDG. The meters shall be installed as per the JERC Regulations.
- 9.3 Prosumer may optionally install an Energy Feed-In Check Meter at its own cost.
- 9.4 Both, uni-directional and bi-directional meter shall be fixed in separate meter boxes in the same proximity.
- 9.5 The EDG shall arrange to test and seal all the energy meters for which Prosumer shall bear all the testing charges.
- 9.6 The Prosumer has to pay monthly Rent of the meters if installed/ provided by EDG.
- 9.7 All such installations shall have electricity meters with feature having load survey for 45 days data storage as provided under JERC Regulations. All Installation with capacity of 25kW shall have an optical communication port and RS 232 port for exchanging data with the EDG. For plant size 1MW and above, the communication shall be with State Load Dispatch Centre (SLDC) in addition to the EDG.
- 9.8 All meters installed in such installation shall be having DLMS/COSEM protocol.

**10 Taxes and Duties**

Tariff fixed under this Agreement shall be exclusive of taxes and duties on sale of power as may be levied by the EDG. Provided that

the taxes and duties levied by the EDG / administration shall be allowed as pass through on actual incurred basis.

## **11 Term and Termination of the Agreement:**

11.1 This Agreement shall be in force for a period of 25 years from the date of commercial operation of the SPV system unless terminated otherwise as provided hereunder.

11.2 Either party to this Agreement shall have the right to terminate this Agreement at any time by serving a written notice of 60 (sixty) days in advance to the other party.

11.3 If the Prosumer commits any breach of the terms of this Agreement, the EDG shall serve a written notice specifying the breach and calling upon the Prosumer to remedy/ rectify the same within 30 (thirty) days or at such other period and in case of failure on the part of the prosumer to remedy/rectify the breach, this EDG shall at the expiry of 30 (Thirty) days or such other period from the delivery of the notice, terminate this agreement by delivering the termination notice,

11.4 Upon termination of this Agreement, Prosumer shall disconnect the SPV system from the distribution system and intimate the same to the EDG.

## **12 Dispute, Change in Law and Supersession:**

12.1 Disputes in billing or payments shall be referred to the Consumer Grievances Redressal Forum (CGRF) established under Sub-section (5) of section 42 of the Electricity Act 2003.

12.2 In case of any change in law during the tenure of this Agreement, the aggrieved party shall be required to approach the JERC for seeking approval of impact due to change in law. The decision of the JERC to acknowledge change in law and the date from which it shall become effective and to provide relief for the same, shall be final and governing on both the parties.

### **13 Interpretation:**

If any question arises relating to the interpretation of any provision of this Agreement, Solar Regulations and the Solar Tariff, the decision of the Appropriate Authority shall be final.

#### 13.1 Where any Dispute

(a) arises from a claim made by any party for any change in or determination of the tariff or any matter related to tariff or claims made by any party which partly or wholly relate to any change in the Tariff or determination of any of such claims shall result in change in the tariff; OR

(b) relates to any matter agreed by the parties hereto to be referred to the JERC,  
shall be referred to the JERC.

14. The original copy of this Agreement shall remain with the EDG and the duplicate thereof with the Prosumer.

15. The parties hereto shall be bound by the JERC Regulations.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement on the day, month and year first hereinabove mentioned.

SIGNED, SEALED AND DELIVERED BY

Signature: \_\_\_\_\_

Shri. \_\_\_\_\_

The Executive Engineer, Division \_\_\_\_\_,

Electricity Department \_\_\_\_\_, Goa.

Seal

For and on Behalf of the

Electricity Department, Goa.

Date: \_\_\_\_\_

SIGNED, SEALED AND DELIVERED BY

Signature: \_\_\_\_\_

Shri. \_\_\_\_\_

Seal

Date: \_\_\_\_\_

For and on behalf of Prosumer

By virtue of (Authority) \_\_\_\_\_ dated \_\_\_\_\_

**WITNESSES:**

(Name) (Address) (Designation) (Signature)

1) \_\_\_\_\_

2) \_\_\_\_\_

